

HIGHLIGHT SP-NTGL

Solar Street Lighting System



SYSTEM BENEFITS HIGHLIGHT SP-NTGL



OFF-GRID COST EFFICIENCY

Fully autonomous solar street light system.

Eliminates trenching, underground cabling, and utility connection requirements.

Reduces installation time and total project cost.



HIGH-OUTPUT NIGHTTIME PERFORMANCE

Integrated LiFePO₄ battery storage system.

Dusk-to-dawn operation profile (dependent on solar availability).

LED output up to 12,000 lumens (up to 100W).



SMART SYSTEM ENGINEERING

MPPT (Maximum Power Point Tracking) solar charge controller.

Manual / Automatic / Time control modes.

IP65 rated luminaire.

Operating temperature: 26°F to 131°F.



ADVANCED SOLAR WRAP TECHNOLOGY

CIGS amorphous flexible solar modules wrapped directly around the pole structure.

Up to 900W total solar capacity.

Designed to support improved wind resistance and reduced shading losses.

ADVANCED VERTICAL TECHNOLOGY

Rugged Mounting Poles

- Designed for long-term outdoor installation
- Supports up to 4 integrated CIGS flexible solar wrap modules
- Engineered for structural durability in outdoor environments
- Pole height customized per project requirements.

High-Performance Luminaire

- LED power – up to 100W (up to 12,000 lm)
- Available in 3000K–6000K and Amber
- CRI >70
- IP65 rated
- Designed for high-output roadway and area lighting applications.



360° Vertical Solar Wrap

- CIGS amorphous flexible solar panel wrap integrated directly onto the pole
- Up to 900W total solar capacity
- Cylindrical configuration for optimized solar exposure
- Designed to support improved wind-load resistance and shading tolerance compared to traditional top-mounted panels.

Smart Power Control

- MPPT (Maximum Power Point Tracking) solar charge controller
- LiFePO₄ battery system – up to 150Ah
- Manual / Automatic / Time control modes
- Dusk-to-dawn operation profile (dependent on solar availability)

Warranty & Reliability

The HIGHLIGHT SP-NTGL system is engineered for reliable long-term outdoor operation.

All major system components are selected and tested to ensure durability, performance consistency, and compliance with applicable standards.

Component	Warranty Coverage
Solar Modules	5-year workmanship warranty. 10/25-year limited power output warranty in accordance with manufacturer specifications.
Battery System (LiFePO4)	Warranty subject to battery manufacturer specifications. Service life dependent on application and operating conditions.
LED Luminaire, MPPT Controller & Smart Electronics	Manufacturer warranty – coverage period subject to component specification
Pole & Structural Components	Structural design intended to support applicable local wind-load requirements. Project-specific engineering available upon request.

Warranty terms may vary based on system configuration and project conditions. Full warranty details are available upon request.

Applications & Use Cases

HIGHLIGHT SP-NTGL

Urban & Residential Streets - Suitable for neighborhood roads, collector streets, and secondary roadways requiring high-output area illumination.

Commercial Parking Areas - Designed for small to mid-size commercial parking lots requiring consistent off-grid lighting performance and broader distribution coverage.

Public Parks & Civic Spaces - Provides uniform dusk-to-dawn illumination in parks, plazas, pedestrian walkways, and community gathering areas.

Residential Developments & HOAs - Well-suited for gated communities, entry roads, and shared outdoor spaces requiring enhanced lighting levels.

Roadway & Perimeter Lighting - Effective for roadway segments, perimeter areas, and larger open-use sites where higher lumen output and wider distribution patterns are required.

Remote or Grid-Limited Locations - Designed for autonomous operation in areas where grid extension is impractical or cost-prohibitive. System configuration should be selected based on photometric design and available solar resources.

This system is designed for roadway and area lighting applications and is not intended for high-mast or highway applications unless specifically engineered.

Technical Overview

- **Solar module type** - CIGS amorphous flexible solar panel wrap integrated onto the pole
- **Total solar power** - Up to 900W
- **Number of solar modules** - Up to 4 panels
- **Solar charge controller** - MPPT (Maximum Power Point Tracking) solar charge controller
- **Battery type** - LiFePO₄ battery system
- **Battery capacity** - Up to 150Ah
- **LED power** - Up to 100W (up to 12,000 lm)
- **Distribution type** - Type III / Type IV / Type V
- **CCT options** - 3000K-6000K / Amber
- **CRI** - >70
- **Control modes** - Manual / Automatic / Time-based control modes
- **Operation profile** - Dusk-to-dawn (dependent on solar availability)
- **IP rating** - IP65
- **Operating temperature** - 26°F to 131°F

Final system configuration may vary based on site conditions and project requirements.

HOW TO SPECIFY & ORDER

The HIGHLIGHT SP-NTGL system is configurable based on site conditions, solar availability, and required lighting performance.

- **DEFINE SITE CONDITIONS AND APPLICATION PARAMETERS**
- **ESTABLISH LIGHTING LEVELS AND OPERATING PROFILE**
- **CONFIGURE SYSTEM COMPONENTS AND CAPACITY**
- **APPROVE FINAL CONFIGURATION AND ASSIGN CONFIGURATION CODE**

Each approved configuration is assigned a unique SolarPath configuration code used for manufacturing and ordering.

LIGHTING DESIGN & PHOTOMETRIC SUPPORT

Lighting design and photometric layouts are available upon request to support proper system specification and code selection.

IMPORTANT NOTES

- System performance depends on site conditions and available solar resources.
- Specifications shown are representative and may vary by configuration.
- All system configurations are reviewed and approved prior to manufacturing.

ORDERING GUIDE

Each approved configuration is assigned a unique SolarPath configuration code used for manufacturing and ordering.

Example: HIGHLIGHT-SP-NTGL-C-150W-A-100W-4-40K-120Ah-XXFT-GR

Model	Solar Panel qty	Solar Panel	LED Head	Led Power	Distribution Type	LED Color Temp	Battery Capacity	Pole Height	Body Color
SP-NTGL	A- 1 panel B- 2 panels C- 3 Panels D - 4 Panels	85W 90W 100W 150W 180W	A B  	30W 60W 80W 100W	3 - Type III 4 - Type IV 5 - Type V	30K 40K 50K 60K Amber	20Ah 40Ah 60Ah 100Ah 120Ah 150Ah	XXFT	GR - Grey BLK- Black *Other colors available upon request

All system configurations are subject to site conditions, solar availability, and final engineering approval prior to manufacturing.



Contact Us

Website



www.solarpathusa.com

Phone



201-490-4499

E-mail



contact@solarpathusa.com
